

This record is a partial extract of the original cable. The full text of the original cable is not available.

UNCLAS SECTION 01 OF 02 AMMAN 004450

SIPDIS

E.O. 12958: N/A

TAGS: [ENRG](#) [TRGY](#) [SENV](#) [XF](#) [JO](#)

SUBJECT: Solar Power for Electricity and Desalination is
Focus of Renewable Energy Conference

1. Summary: Over 170 people, including five ministers, from the Middle East and Europe were in Amman for the May 9-11 Middle East and North Africa Renewable Energy Conference (MENAREC-2). The focus of the meeting was using the Middle East's abundant solar energy for use in desalination and electricity production, including for export to Europe. End summary.

S&T Council Patron Promotes Electricity Exports to Europe

2. MENAREC-2 was a follow-up to the first MENAREC conference in Sanaa, Yemen on April 21-22, 2004. MENAREC-2 was co-sponsored by Jordan's National Energy Research Center and the Higher Council for Science and Technology, and was funded by the German Environment Ministry. See the website at www.nerc.gov.jo/menarec2. The Chairman of Jordan's Higher Council for Science and Technology Prince Al-Hasan Bin Talal presided at the opening session, and advocated creating a regional commission for energy and water issues analogous to the European Coal and Steel Community. He sees Europe and the Middle East as natural partners in a supra-regional energy network based on solar-generated electricity being exported from the Middle East to Europe.

Steam from Solar to Drive Turbines, Desalination

3. Participants at MENAREC-2 discussed developing industrial-scale desalination and power plants using Concentrated Thermal Solar Power (CSP). CSP systems gather the sun's light with mirrors and use it to heat water to create steam, as opposed to photovoltaic systems that generate electricity directly from sunlight. The steam from CSP systems can drive a turbine for power generation and thermal desalination systems. These CSP systems would be hybrids: CSP during the day and fossil energy-based at night. Experts at the conference posited that desalination and power systems based on CSP will be cheaper than oil and gas-based systems in a few years and will be less vulnerable to fluctuations in oil prices. The goal of MENAREC is to bring prices for solar energy below those for fossil energy within a decade. A solar desalination plant for Sanaa, Yemen is being touted as a MENAREC pilot project.

Private Investor to Build Integrated Plant in Aqaba

4. There is also a plan underway to build an integrated five-megawatt power plant and a 30,000 cubic meter per day desalination plant in Aqaba, Jordan. ESTHoff and ESTH Specialist met MENAREC-2 conference organizer Ammar Al-Taher from Jordan's National Energy Research Center (NERC) on May 22 for a follow-up discussion to the MENAREC-2 meeting and to learn more about the Aqaba project. Al-Taher said there are currently no companies capable of making integrated CSP desalination and electricity production plants. For the Aqaba project, he said that the buyer (a real estate developer) will have to buy components of the system from different vendors and do its own integration. (Note: This proposed integrated system is different from a USAID solar desalination pilot project that operates in the Aqaba Industrial Zone. End note.)

Kyoto Protocol Will Spur Demand for "Green" Electricity

5. Al-Taher said that national regulatory schemes have an enormous impact on the economics of renewable energy, and that the demand in Europe for "green" (non-fossil generated) electricity sparked by the Kyoto Protocol will inevitably increase demand for solar energy and make it economic. So-called "feed-in" laws in Italy and Germany, which set aside a percentage of electricity production for renewable energies, will help to start that market, he said. Solar costs will drop as the industry expands, creating economies of scale, and as technology becomes cheaper and more efficient, he added.

Energy Efficiency Projects Have High Rates of Return

6. Al-Taher had just returned from an energy efficiency conference in Saudi Arabia and said he saw evidence there of increasing interest even among big oil producing states in solar energy (which they also have in abundance) and in energy efficiency. He sees solar as a market opportunity and as a way of diversifying out of oil. He said electricity demand is rising 15% per year in Saudi Arabia and that it will take \$10 billion of investment per year to

meet that demand. For that reason, he said, energy efficiency projects will have a rate of return "higher than drug companies." He pointed to building codes, energy-efficient appliances and more efficient generation as ways to conserve energy. He also noted that with huge energy investments going into Iraq, now is the time to look at energy efficiency, since this infrastructure will be operating for the next 20-40 years.

17. Comment: There is a distinct line in the Middle East between the oil "haves" and "have-nots." With sunny climates and almost no oil production, several of the countries participating in MENAREC-2 are natural candidates for these combined power/desalination plants, which would address both their fresh water concerns and their dependence on oil from their Arab brothers.

HALE